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GARDEN NOTES

IRON OUT PLANT ANEMIA

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"You say my plants are anemic? How is it possible for a plant to have iron-poor blood? And, how can you tell if a plant is lethargic?"

Iron chlorosis is one of the most common plant problems in Northern Utah says Jerry Goodspeed, Utah State University Extension horticulturist. Plants with this "anemic" look have leaves that turn light green, yellow or even white, while the veins in the leaves remain green. It sometimes looks as if someone has drawn the veins in with a green pen.

A severe case of iron chlorosis causes the margins of the leaves to burn and the leaves remain small, yellow and misshapen, Goodspeed explains. Trees and shrubs affected with this problem have slow growth and poor, if any, fruit production. Years of prolonged iron chlorosis weakens the plant, and when severe enough, eventually they die.

Iron chlorosis is caused when plants are unable to get sufficient iron from the soil. This problem is aggravated by alkaline soils. "Our soils are very alkaline," Goodspeed says. "They can also be high in phosphorus, lime, salt, copper and other micro nutrients. These factors tie up the iron available in our soils. The lime content and pH are especially bad. If they get too high, the available iron sharply decreases."

Another factor contributing to iron chlorosis is excess water, he says. Since we live in an arid area, people tend to over-water their plants. Excess water reduces the ability of many plants to take up iron. Trees planted in lawns suffer because the lawn is watered too often and not deeply enough.

Preventing and controlling iron chlorosis can be a difficult problem to solve, Goodspeed says. "The best option is to avoid plants that struggle with iron chlorosis. Some of the more common plants susceptible to this problem include silver maple, red maple, pin oak, catalpa, raspberries, peach, and birch trees. Many of these plants are favorites though, and are already planted or will be regardless of this challenge.

"Plants already in the ground and suffering from iron chlorosis have a few options to minimize this problem. The most important is to water properly. The best watering method is to do so as infrequently and deeply as possible while the worst strategy is watering every day."

If the soil is clay it may be able to go a week or longer between watering, Goodspeed explains. This will promote deeper roots in turf grass and other plants, along with helping them survive and look better. To adapt them to this new schedule, gradually stretch the length of time between waterings. Another method, if possible, is to create good drainage for the plants. Avoid any standing water or locating plants in low locations. Whenever possible, plant in raised beds or on mounds.

“Many products on the market claim to help eliminate iron chlorosis,” he says. “There are also products which claim to cure viral diseases, a two-year-olds temper tantrums and your post-nasal drip. I don't believe any of them. There is no one miracle cure. There are, however, some products that may help reduce the symptoms.”

There are various iron products available, but look for chelated iron on the label, Goodspeed says. They make the iron a little more available to the plants. The best compound is EDDHA, which is sold as Iron Sequestrine 138 and Millers Ferriplus. These products are expensive and often hard to find, but also actually work most of the time. They need to be incorporated into the ground every year or two in the spring right before the first flush of growth begins.

“I have heard of many other remedies,” he says. “People have tried sticking old nails into raspberry beds and pouring iron shavings around strawberries. These usually do little except cause their neighbors to question whether it's the plant or them that needs the help. Stick with the recommended iron products applied at the right time.”

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